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09/982,617	10/18/2001	Michael R. Boyd	65783-0007	8210
10291 7590 04/20/2007 RADER, FISHMAN & GRAUER PLLC 39533 WOODWARD AVENUE SUITE 140 BLOOMFIELD HILLS, MI 48304-0610			EXAMINER SHELEHEDA, JAMES R	
			ART UNIT	PAPER NUMBER
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**Technology Center 2600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/982,617  
Filing Date: October 18, 2001  
Appellant(s): BOYD ET AL.

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Michael R. Boyd  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 01/03/07 appealing from the Office action  
mailed 07/03/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,678,892	Lavelle et al.	01-2004
5,848,367	Lotocky et al.	12-1998

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 11, 29, 20 and 36 stand rejected under 35 U.S.C. 102(e) as being unpatentable over Lavelle. This rejection is set forth in a prior Office Action, mailed 07/03/06.

Claims 2, 12, 31 and 37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lavelle. This rejection is set forth in a prior Office Action, mailed 07/03/06.

**(10) Response to Argument**

a. On page 13, appellant argues that Lavelle does not disclose an interface stage for interfacing with a digital data network.

In response, Lavelle specifically discloses a bus, which can comprise a single wire, which will interconnect a plurality of different devices (170, 172; Figs.

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1A and 1B; column 4, line 66-column 5, line 7 and column 9, line 60-column 10, line 2). The interconnection of a plurality of devices is, by definition, a network.

Further, Lavelle specifically discloses wherein the bus will transmit digital data signals, as the output from the plurality of digital sources (Fig. 1A; column 4, lines 16-40) is transmitted across the bus to the signal processing/conversion facilities (column 6, lines 9-42). Thus, as digital data signals are clearly transmitted across the bus network to be decoded and subject to *digital to analog conversion*, the data bus is clearly disclosed as being a digital data network. Thus appellant's arguments in regards to the presence of a digital data network are not convincing.

Finally, Lavelle clearly discloses wherein the system comprises "input/output interfaces" (column 3, lines 25-43) and wherein the system "interfaces" with the digital data network (as all of the devices connect with the bus; see Figs. 1A-1B). As all of the different input/output devices interface with the digital data network (see Fig. 1A), this clearly meets the claim limitation of "an interface stage for interfacing with a digital data network", as the data signals must pass through an interface to reach the digital data bus from the various inputs/outputs. As seen in appellant's own specification at page 9, lines 14-19, the "interface stage" is simply disclosed as the interface allowing connection between the decoder circuitry and the network. As Lavelle's decoder circuitry and network are clearly disclosed as being connected, as signals are clearly transmitted to/from the decoder across the network, the "input/output interfaces"

disclosed by Lavelle clearly read upon the claim limitations. Therefore, appellant's arguments are not convincing.

b. On pages 14-15, appellant argues that Lavelle does not disclose a digital data network.

As indicated above, Lavelle specifically discloses wherein the bus will transmit digital data signals, as the bus is receiving signals from a plurality of digital sources (Fig. 1A; column 4, lines 16-40). As the decoding and digital to analog conversion of the received digital signals is performed at the signal processing/conversion facilities (column 6, lines 9-42), the bus is clearly transmitting digital data signals, and thus clearly reads upon a "digital data network". Appellant's reasoning as to why the bus would only transmit analog signals completely contradicts Lavelle's disclosed system, as it clearly shown that digital signals must be transmitted across the bus. For example, a DVD and a CD (which are some of the sources disclosed by Lavelle; Fig. 1A and column 4, lines 16-40) are *digital* storage devices for storing *digital* data. This data would then have to be decoded and converted to analog to be used in a typical analog television or radio. In this case, however, Lavelle specifically states that the decoding for the various input sources would be performed at signal processing facilities, 127 (column 6, lines 9-42), which is connected to the input sources *via the bus* (see Fig. 1A). Thus, the most basic premise of Lavelle's system involves

the transmission of digital data across the bus, which then clearly qualifies as a digital data network, and is not limited to analog as appellant suggests.

c. On pages 15-16, appellant argues that Lavelle does not disclose a "microcontroller for controlling said interface stage and said decoder". More specifically, appellant states the Lavelle merely discloses that the invention may "include a CPU".

In response, Lavelle specifically discloses wherein the system may be implemented on a computer platform including a CPU, RAM and an operating system which controls the execution of the system (column 3, lines 26-41). Thus, Lavelle clearly discloses more than the mere inclusion of a CPU, as the system is embodied as a *computer*, with an operating system running in memory and on the CPU, which is *controlling the execution of the system* (column 3, lines 38-41). As the operating system (running on the CPU) is controlling the execution of the different system applications, the execution of the individual elements of the system are under the control of the computer operating system. This ~~could~~ clearly include such elements as the "interface stage" and "digital data network". Thus appellant's arguments are not convincing.

d. In regards to appellant's arguments on page 16, in regards to the "digital data stream" of claim 29, please see (b) above in regards to the clear use of a digital data network in Lavelle's system, as Lavelle clearly discloses the

transmission of digital data streams across the digital data network, and is not limited to analog as appellant suggests.

e. In regards to appellant's arguments on page 17, in regards to the "digital data stream" and "interface stage" of claim 30, please see (a) and (b) above in regards to the clear use of a digital data network and an interface stage in Lavelle's system.

f. In regards to appellant's arguments on pages 17-18, in regards to claims 2, 12, 31 and 37, it is noted that, as indicated above, Lavelle clearly discloses an interface stage for interfacing said decoder board with a digital data network:

Although Lavelle discloses wherein one of ordinary skill in the art could utilize a variety of different implementations for the data bus (column 9, line 60-column 10, line 2), he fails to specifically disclose fiber optic.

As indicated in the previous actions, the particular use of fiber optic cables for the implementation of a data network is notoriously well known to those of ordinary skill in the art, as fiber optic cables provide numerous benefits over more traditional connections. These include higher bandwidth, lower weight and the reduction of RF noise, all of which would be pertinent and desirable in the implementation of the particular system disclosed by Lavelle.



Furthermore, appellant was further provided with the Lotocky patent which clearly demonstrates that it was known at the time of invention to utilize a fiber optic network (see Fig. 1-2; column 4, lines 6-26) to distribute audio and video within a vehicle (column 3, lines 24-55). The supposed differences indicated by appellant merely reflect the size of the particular vehicle. The mere fact that Lotocky vehicle distribution system includes more passengers does not alter the clear use of fiber optic networks for distribution within a vehicle. The benefits therein, were further known to those of skill in the art, as fiber optic connections eliminate RF radiation and have higher bandwidth while reducing the transported weight, all of which would motivate one to utilize a fiber optic network within Lavelle's system.

In particular regard to "interfacing said decoder board with a fiber optic network", it is noted that as indicated above, Lavelle discloses the use of an interface stage for interfacing the decoder board with the digital data network. Lavelle further discloses wherein a plurality of different bus architectures, and thus corresponding interfaces to allow communication with the particular bus, may be utilized (column 9, line 60-column 10, line 2). Thus, the modification of Lavelle to utilize known fiber optic network, and a corresponding interface to allow communication with the fiber optics, would have clearly been within the skill and knowledge of one of ordinary skill in the art.

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g. In regards to the "lack of motivation" to modify Lavelle, it is once again noted that the many known benefits of fiber optics, such increased bandwidth, reduced weight and the elimination of RF radiation would clearly motivate one to include a fiber optic network within Lavelle. Appellant's arguments in regards to the "small size" of Lavelle's system are not persuasive, as these specific benefits are related to the size of the network. The fact that a larger network may gain corresponding *larger* benefits, as more fiber optic cable would be used as opposed to coax or other types, this does not preclude the fact that a "small" network would still clearly gain benefit from the use of fiber optic. Thus, appellant's arguments are not convincing

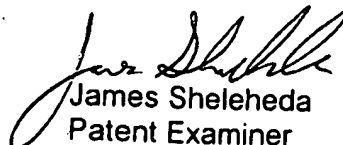
**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

JS


  
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